



MEMORANDUM

DATE: June 21, 2022

TO: Bob Douglas, Conservation Agent

FROM: Ann M. Marton *AMM*

RE: DEP File #: 090-1373 LEC File #: TOA\22-116.02

Notice of Intent Application Wetland Boundary Review
22 Williams Street, Andover, MA

CC: Ben Osgood, Ranger Engineering Group, Inc.

The following and attached correspondence summarizes LEC’s wetland boundary peer review associated with the above-referenced NOI Application filed with the Commission on February 1, 2022. LEC was provided an electronic copy of the NOI Application and Site Plans on March 9, 2022. LEC also was forwarded a total of ten emails sent to the Commission regarding the proposed project. Many of the emails raised concerns and questions regarding the validity of the wetland delineation depicted on the Site Plans as compared to the Town GIS wetland mapping. Most other concerns related to stormwater management that should be addressed by the engineering peer reviewer, Janet Bernardo of Horsley Witten Group. LEC provided a scope and fee for the peer review on March 14, 2022. On March 18, 2022, LEC received notification to proceed.

Town GIS Mapping

As stated on the Andover GIS webpage, online GIS data was captured from aerial photography and includes a variety of planimetric layers such as building footprints, roads, topography, water bodies, etc. Additional features such as water, sewer, and drainage utilities were collected using GPS or by merging GIS data with digitized maps (e.g., parcels and wetland mapping). The GIS wetland data also relies on the MassDEP Wetland Data layer that is based on photographic aerial interpretation. The MassGIS Data MassDEP Wetland Overview (<https://www.mass.gov/info-details/massgis-data-massdep-wetlands-2005>) specifically states:

“The wetlands and hydrologic connection information is for **planning purposes only**. The wetlands boundaries shown in these map layers have been determined by photographic interpretation. They do not represent, and should not be used as, wetlands delineations under the Massachusetts Wetlands Protection Act (M.G.L. c. 131 §40) and its regulations. **Wetlands boundary determination for other purposes, such as the [Wetlands Protection Act MA Act M.G.L. c. 131](#) or local bylaws must use the relevant procedures and criteria.**”

LEC Environmental Consultants, Inc.

www.lectenvironmental.com

12 Resnik Road
 Suite 1
 Plymouth, MA 02360
 508.746.9491

380 Lowell Street
 Suite 101
 Wakefield, MA 01880
 781.245.2500

100 Grove Street
 Suite 302
 Worcester, MA 01605
 508.753.3077

P.O. Box 590
 Rindge, NH 03461
 603.899.6726

680 Warren Avenue
 Suite 3
 East Providence, RI 02914
 401.685.3109

PLYMOUTH, MA

WAKEFIELD, MA

WORCESTER, MA

RINDGE, NH

EAST PROVIDENCE, RI



Wetland Boundary Field Review

The two Bordering Vegetated Wetlands (BVW) depicted on the Site Plans are located off-site on abutting properties: Hunters Ridge Condominium Association to the south and 28 Williams Street to the west. Access authorization letters were sent to both on March 22, 2022. Both granted access for LEC to enter their properties (**Attachment A**), to perform a field review of the BVW delineation depicted on the Site Plans. Additionally, with the Applicant's consent, I delayed my site evaluation of the BVW boundary until May to enable full leaf out of ground cover plants.

On May 25, 2022, I conducted a site evaluation in accordance with the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *WPA*), its implementing Regulations (310 CMR 10.00, the *WPA Regulations*), the *Town of Andover General Bylaw for Wetlands Protection* (the *Bylaw*), the *Town of Andover Conservation Commission Wetland Protection Regulations* (the *Bylaw Regulations*), and *Field Indicators for Identifying Hydric Soils in New England* (version 4, *Field Indicators*). Prior to my site evaluation, I reviewed the DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Forms (Data Forms) dated June 23, 2021, prepared by Maureen Herold of Norse Environmental Services, Inc. that were included in the NOI Application. During my site visit, I evaluated vegetation (trees, shrubs, vines, and ground cover), soils (to a depth of 20+ inches), and indicator of hydrology associated with the BVWs to the south and west.

Vegetation observed within the BVW in addition to those species listed on the Data Forms included red maple (*Acer rubrum*, FAC), black cherry saplings (*Prunus serotina*, FACU), Japanese knotweed (*Polygonum cuspidatum*, UPL), silky dogwood (*Cornus amomum*, FACW), glossy buckthorn (*Frangula alnus*, FAC), royal fern (*Osmunda regalis*, FACW), skunk cabbage (*Symplocarpus foetidus*, OBL), cinnamon fern (*Osmunda cinamomea*, FACW), and Canada mayflower (*Maianthemum canadensis*, FAC).

Vegetation observed in the upland in addition to that listed on the Data Forms included: black cherry, Canada mayflower, Eastern hayscented fern (*Dennstaedtia punctilobula*, UPL), Virginia creeper (*Parthenocissus quinquefolia*, UPL), and false Solomon's-seal (*Maiantehnum racemosum*, FACU).

LEC inspected soils using a hand-held Dutch style auger at numerous locations along each of the delineated BVWs. Soils observed within the wetland and upland were consistent with those reported on the DEP Data Forms. The BVW to the south is located at the base of a concrete retaining wall and receives surficial flow from a culvert discharging flows from the project site into the BVW. It is important to maintain these flows as it significantly contributes to the hydrology supporting the BVW system. The BVW to the west occurs at the base of a moderately steep, descending slope. LEC concurs with the delineation of both BVWs.

The 100-foot Buffer Zone to the southerly BVW extends into the proposed cul-de-sac; a portion of the dwelling, driveway, and associated site grading for Lot 2; a small portion of Lot 3; and Parcel A that contains the proposed subsurface stormwater chambers. The Buffer Zone to the westerly BVW is coterminous with the property boundary and no work is proposed within this Buffer Zone.



The Applicant proposes 775 SF of temporary disturbance to the 25-Foot No Disturbance Zone (NDZ) to replace an existing drainage pipe and remove an existing garage. The Applicant proposed to allow the NDZ disturbance and other portions of the Buffer Zone to restore naturally. LEC recommends that the Applicant restore all of the 25-foot NDZ, all of Parcel A, and the swale and drainage easement on Lot 3 shaded in green on **Attachment B** with a native pollinator seed mix such as Ernst XERCES Northeast Pollinator Mix or equivalent (**Attachment C**) and limit mowing to once per year between November and March.

A t t a c h m e n t A

Signed Access Authorization Letters



TOWN OF ANDOVER

Town Offices
Conservation Department
36 Bartlet Street
Andover, MA 01810
(978) 623-8630
www.conservation@andoverma.gov

March 21, 2022

Hunters Ridge Condominium Association
C/O Jay Doherty
45 Martingale Lane
Andover, MA 01810

**RE: Wetland Peer Review Access Authorization
22 William Street
Andover, Massachusetts**

Dear Mr.Doherty:

LEC Environmental Consultants, Inc. (LEC) has been retained by the Andover Conservation Commission to perform a peer review of the Notice of Intent Application filed by Steven Leed for the Hidden Pines Lane Subdivision at 22 Williams Street, Andover, MA. Part of this peer review is to review and confirm or modify the boundary of wetland resource areas associated with the project. The Site Plans filed by Mr. Leed depict wetlands on a portion of your property at 22 William Street, Andover, MA that will place Buffer Zone on Mr. Leed's property.

The Conservation Commission is requesting access authorization for LEC to enter your property, to the minimal amount necessary, to review and modify, if necessary, the wetland boundary as it relates to 22 Williams Street. This work will involve examination of vegetation and examination of soils using a hand-held soil auger or hand-held spade to evaluate hydric soil conditions and to place orange flags to mark any changes to the wetland boundary. We anticipate this work to occur ASAP following your authorization. Upon completion of review, if the boundary is modified, Mr. Leed's Engineer/Surveyor will be required to survey locate the new flags and depict them on the Site Plans.

If this is acceptable, please sign below and return to the Conservation Commission or email to Lynn Viselli at lynn.viselli@andoverma.us.

Sincerely,

Andover Conservation Commission

Robert Douglas, Conservation Director

Access Authorization Granted

Please print your name and address and sign below:

Name: Jay Doherty

Address: 45 Martingale Lane

Authorized Signatory: Jay Doherty

Date: 3/21/22

Contact Phone Number: 978-837-8557



TOWN OF ANDOVER

Town Offices
Conservation Department
36 Bartlet Street
Andover, MA 01810
(978) 623-8630
www.conservation@andoverma.gov

March 22, 2022

Ayelet Katz

Gideon Kojokaro

28 William Street

Andover, MA 01810

**RE: Wetland Peer Review Access Authorization
28 William Street
Andover, Massachusetts**

Dear Ayelet Katz and Gideon Kojokaro:

LEC Environmental Consultants, Inc. (LEC) has been retained by the Andover Conservation Commission to perform a peer review of the Notice of Intent Application filed by Steven Leed for the Hidden Pines Lane Subdivision at 22 Williams Street, Andover, MA. Part of this peer review is to review and confirm or modify the boundary of wetland resource areas associated with the project. The Site Plans filed by Mr. Leed depict wetlands on a portion of your property at 28 William Street that will place Buffer Zone on Mr. Leed's property.

The Conservation Commission is requesting access authorization for LEC to enter your property, to the minimal amount necessary, to review and modify, if necessary, the wetland boundary as it relates to 22 Williams Street. This work will involve examination of vegetation and examination of soils using a hand-held soil auger or hand-held spade to evaluate hydric soil conditions and to place orange flags to mark any changes to the wetland boundary. We anticipate this work to occur ASAP following your authorization. Upon completion of review, if the boundary is modified, Mr. Leed's Engineer/Surveyor will be required to survey locate the new flags and depict them on the Site Plans.

If this is acceptable, please sign below and return to the Conservation Commission or email to Lynn Viselli at lynn.viselli@andoverma.us.

Sincerely,

Andover Conservation Commission

Robert Douglas, Conservation Director

Access Authorization Granted

Please print your name and address and sign below:

Name: Ayelet Katz

Address: 28 William St. Andover, MA.

Authorized Signatory: Ayelet Katz

Date: 3/23/2022

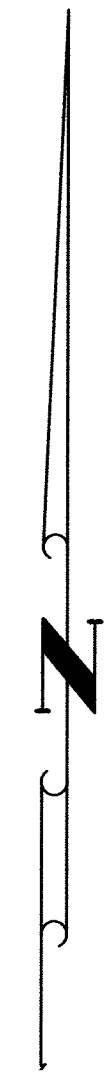
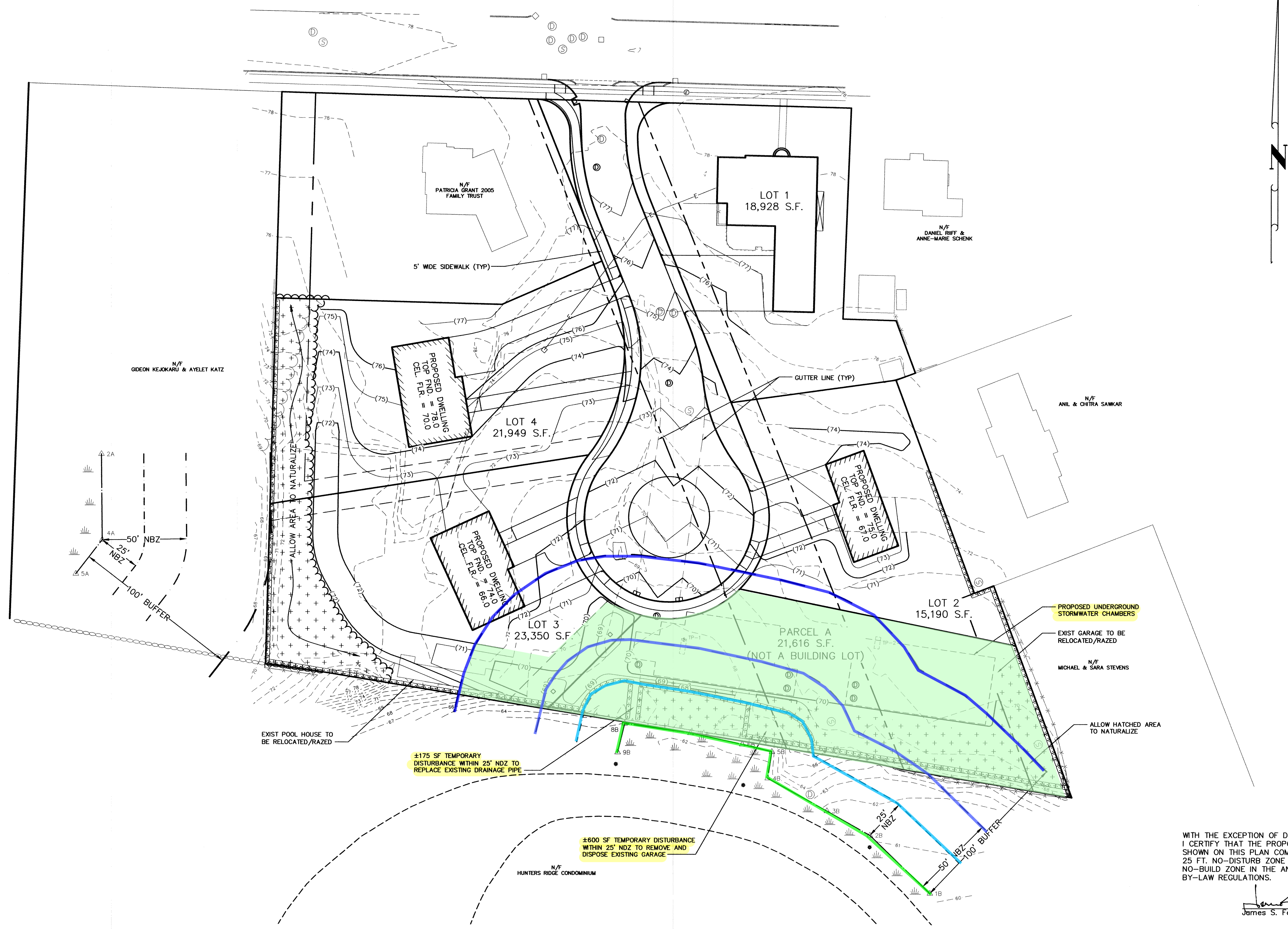
Contact Phone Number: 978 973 5956

Contact Email: kejoa10@gmail.com

A t t a c h m e n t B

Layout and Grading Plan Mark-Up for Recommended Seeding

WILLIAM STREET



WITH THE EXCEPTION OF DEMOLITION WORK,
I CERTIFY THAT THE PROPOSED WORK
SHOWN ON THIS PLAN COMPLIES WITH THE
25 FT. NO-DISTURB ZONE AND THE 50 FT.
NO-BUILD ZONE IN THE ANDOVER WETLAND
BY-LAW REGULATIONS.

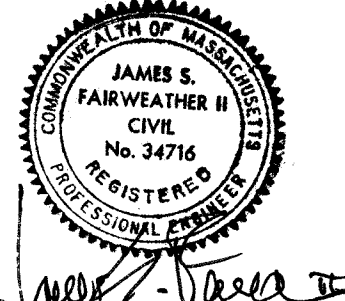
James S. Fairweather, P.E.
James S. Fairweather, P.E.

**DEFINITIVE SUBDIVISION
LAYOUT & GRADING PLAN
HIDDEN PINES LANE
ANDOVER, MASS**

PREPARED FOR: STEVEN LEED
DATE: FEBRUARY 1, 2022
SCALE: 1" = 30'

andover consultants inc.

1 East River Place
Methuen, Mass. 01844
Telephone: 978-687-3828 Reg. Professional Engineer



2-7-22

A t t a c h m e n t C

Recommended Ernst XERCES Northeast Pollinator Mix



Ernst Conservation Seeds
 8884 Mercer Pike
 Meadville, PA 16335
 (800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: May 14, 2021

XERCES Northeastern Pollinator Mix - XERC00103

Botanical Name	Common Name	Price/lb
22.40 % <i>Schizachyrium scoparium</i> , 'Camper'	Little Bluestem, 'Camper'	19.20
19.50 % <i>Elymus virginicus</i> , Madison-NY Ecotype	Virginia Wildrye, Madison-NY Ecotype	9.60
10.00 % <i>Echinacea purpurea</i>	Purple Coneflower	46.21
9.90 % <i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis	32.56
9.00 % <i>Chamaecrista fasciculata</i> , PA Ecotype	Partridge Pea, PA Ecotype	7.67
7.00 % <i>Heliopsis helianthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype	38.71
3.10 % <i>Penstemon digitalis</i>	Tall White Beardtongue	211.10
2.80 % <i>Aster novae-angliae</i> , PA Ecotype	New England Aster, PA Ecotype	500.34
2.70 % <i>Aster lateriflorus</i>	Calico Aster	677.09
2.00 % <i>Asclepias incarnata</i> , PA Ecotype	Swamp Milkweed, PA Ecotype	200.83
1.60 % <i>Eupatorium maculatum</i> , PA Ecotype	Spotted Joe Pye Weed, PA Ecotype	423.61
1.60 % <i>Monarda fistulosa</i> , Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype	179.80
1.50 % <i>Pycnanthemum tenuifolium</i>	Narrowleaf Mountainmint	186.16
1.20 % <i>Agastache foeniculum</i>	Anise (Lavender) Hyssop	220.30
1.00 % <i>Lespedeza capitata</i> , RI Ecotype	Roundhead Lespedeza, RI Ecotype	136.61
1.00 % <i>Zizia aurea</i> , PA Ecotype	Golden Alexanders, PA Ecotype	327.63
0.80 % <i>Eupatorium perfoliatum</i> , PA Ecotype	Boneset, PA Ecotype	386.38
0.80 % <i>Solidago juncea</i> , PA Ecotype	Early Goldenrod, PA Ecotype	381.99
0.80 % <i>Solidago nemoralis</i> , PA Ecotype	Gray Goldenrod, PA Ecotype	405.16
0.50 % <i>Geum canadense</i> , PA Ecotype	White Avens, PA Ecotype	207.10
0.40 % <i>Asclepias syriaca</i>	Common Milkweed	181.59
0.40 % <i>Solidago bicolor</i> , PA Ecotype	White Goldenrod, PA Ecotype	443.81

100.00 %

Mix Price/lb PLS: \$92.93

Seeding Rate: Seed at 4.5 lbs - 6.7 lbs PLS/acre. A cover crop should be applied with this mix. For a cover crop use one of the following: oats (30 lbs/acre; 1 Jan to 30 Apr), brown top millet (10 lbs/acre; 1 May to 31 Aug), or grain rye (30 lbs/acre; 1 Sep to 31 Dec).

Uplands & Meadows

Note: Mix formulations are subject to change without notice depending on the availability of existing and new products. While the formula may change, the guiding philosophy and function of the mix will not.

Price quotes guaranteed for 30 days.
All prices are FOB Meadville, PA.
Please check our web site at www.ernstseed.com
for current pricing when placing orders.